

Attorney's Docket No. K&A 23-0628
Client's Docket No. 15202

APPLICATION

FOR UNITED STATES LETTERS PATENT

SPECIFICATION

TO ALL WHOM IT MAY CONCERN:

BE IT KNOWN THAT I, **JAMES ASCH**, a citizen of UNITED STATES OF AMERICA, have invented a new and useful **MAIL RETRIEVAL SYSTEM** of which the following is a specification:

MAIL RETRIEVAL SYSTEM

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BACKGROUND OF THE INVENTION

Field of the Invention

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The present invention relates to mail carrier devices and more particularly pertains to a new mail retrieval system for allowing a user to limit exposure to the elements while retrieving mail.

15 Description of the Prior Art

The use of mail carrier devices is known in the prior art. U.S. Patent No. 1,260,877 describes a device for transporting mail from one location to another. Another type of mail carrier device is U.S. Patent No. 1,113,451 having a suspended trolley connected to a mail box for allowing mail to be delivered from a roadside to the house a distance away. U.S. Patent No. 986,011 has a suspended system for retrieving a mail box from a remote location and transporting the mail box to the house.

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While these devices fulfill their respective, particular objectives and requirements, the need remains for a system that has certain improved features that makes the retrieval of the mail box less susceptible to failure due to inclement weather.

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SUMMARY OF THE INVENTION

The present invention meets the needs presented above by providing a carriage member sliding along a rail member which allows the mail box to be retrieved with little disruption for the weather.

Still yet another object of the present invention is to provide a new mail retrieval system that allows the user to remote signal the retrieval of the mail receiving member.

Even still another object of the present invention is to provide a new mail retrieval system that can handle heavy loads in the mail receiving member without affecting performance.

To this end, the present invention generally comprises a support assembly being designed for being positioned on a support surface whereby the support assembly extends between a curb and a house. A mail receiving member is coupled to the support assembly whereby the mail receiving member is selectively transported along the support assembly. The mail receiving member is designed for receiving mail when the mail receiving member is positioned adjacent the curb. The mail receiving member permits a user to retrieve the mail when the mail receiving member is transported along the support assembly to be positioned proximate the house. A drive assembly is coupled to the support assembly. The drive assembly is operationally coupled to the mail receiving assembly whereby the drive assembly is for transporting the mail receiving member along the support assembly when the drive assembly is actuated by the user to allow the user to retrieve the mail in the mail receiving box without having to walk to the curb.

There has thus been outlined, rather broadly, the more important features of the invention in order that the detailed description thereof that follows may be better understood, and in order that the present contribution to the art may be better appreciated. There are additional features of the invention that will be described hereinafter and which will form the subject matter of the claims appended hereto.

The objects of the invention, along with the various features of novelty which characterize the invention, are pointed out with particularity in the claims annexed to and forming a part of this disclosure.

BRIEF DESCRIPTION OF THE DRAWINGS

The invention will be better understood and objects other than those set forth above will become apparent when consideration is given to the following detailed description thereof. Such description makes reference to the annexed drawings wherein:

Figure 1 is a perspective view of a new mail retrieval system according to the present invention.

Figure 2 is a cross-sectional view of the present invention taken along line 2-2 of Figure 1.

DESCRIPTION OF THE PREFERRED EMBODIMENT

With reference now to the drawings, and in particular to Figures 1 through 2 thereof, a new mail retrieval system embodying the principles and concepts of the present invention and generally designated by the reference numeral 10 will be described.

As best illustrated in Figures 1 through 2, the mail retrieval system 10 generally comprises a support assembly 12 being designed for being positioned on a support surface whereby the support assembly 12 extends between a curb and a house.

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A mail receiving member 14 is coupled to the support assembly 12 whereby the mail receiving member 14 is selectively transported along the support assembly 12. The mail receiving member 14 is designed for receiving mail when the mail receiving member 14 is positioned adjacent the curb. The mail receiving member 14 permitting a user to retrieve the mail when the mail receiving member 14 is transported along the support assembly 12 to be positioned proximate the house.

15 A drive assembly 16 is coupled to the support assembly 12. The drive assembly 16 is operationally coupled to the mail receiving assembly whereby the drive assembly 16 is for transporting the mail receiving member 14 along the support assembly 12 when the drive assembly 16 is actuated by the user to
20 allow the user to retrieve the mail in the mail receiving box without having to walk to the curb.

The support assembly 12 comprises a rail member 18 and a carriage member 20. The carriage member 20 is slidably coupled to
25 the rail member 18 whereby the carriage member 20 selectively slides along a length of the rail member 18. The carriage member 20 is operationally coupled to the drive assembly 16 whereby the drive assembly 16 is for sliding the carriage member 20 along the rail member 18 when the drive assembly 16 is actuated by the user.
30 The mail receiving member 14 is coupled to the carriage member 20

whereby the mail receiving member 14 is transported along the rail member 18 when the carriage member 20 is slid along the rail member 18 by the drive assembly 16.

5 The support assembly 12 comprises a plurality of stanchion members 22. Each of the stanchion members 22 is coupled to the rail member 18. Each of the stanchion members 22 is designed for engaging the support surface whereby the stanchion members 22 are for supporting the rail member 18 above the support surface.

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 The drive assembly 16 comprises a motor member 24. The motor member 24 is operationally coupled to the carriage member 20 of the support assembly 12 whereby the motor member 24 is for sliding the carriage member 20 along the rail member 18 when the
15 drive assembly 16 is actuated by the user. The motor assembly is reversed each time the motor assembly is actuated whereby the motor assembly slides the carriage member 20 away from the motor member 24 upon actuation of the drive assembly 16 and slides the carriage member 20 towards the motor member 24 upon alternating
20 actuations of the drive assembly 16. The motor assembly is designed for being operationally coupled to a power source for supplying power to the motor member 24.

 The drive assembly 16 comprises a drive member 26. The
25 drive member 26 is operationally coupled between the motor member 24 and the carriage member 20. The drive assembly 16 is actuated by the motor assembly to slide the carriage member 20 along the rail member 18 when the drive assembly 16 is actuated by the user.

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The drive member 26 comprises a chain portion 28 and a cable portion 30. The chain portion 28 is coupled to the cable portion 30. A free end 32 of the chain portion 28 is coupled to the carriage member 20. A distal end 34 of the cable portion 30 is coupled to the carriage member 20 opposite the free end 32 of the chain portion 28. The chain portion 28 of the drive member 26 is operationally coupled to the motor member 24 whereby the free end 32 of the chain portion 28 is selectively drawn closer to the motor assembly to slide the carriage member 20 along the rail member 18 towards the motor member 24 when the drive assembly 16 is actuated by the user. The cable member is operationally coupled to the support assembly 12 such the chain portion 28 pulls on the cable portion 30 to draw the distal end 34 of the cable portion 30 away from the motor member 24 to slide the cable assembly along the rail member 18 away from the motor member 24 upon alternating actuations of the drive assembly 16.

The drive assembly 16 comprises a pulley member 36. The pulley member 36 is rotationally coupled to the support assembly 12. The cable portion 30 of the drive member 26 extends around the pulley member 36 whereby the pulley member 36 rotates to provide a smooth operation of the drive member 26 when the drive assembly 16 is actuated by the user.

The drive assembly 16 comprises a sprocket member 38. The sprocket member 38 is coupled to the motor member 24 whereby the sprocket member 38 is selectively rotated by the motor member 24. The sprocket member 38 engages the chain portion 28 of the drive member 26 whereby the sprocket member 38 actuates the chain portion 28 of the drive member 26 to slide the carriage member 20

along the rail member 18 when the drive assembly 16 is actuated by the user.

5 The drive assembly 16 comprises a housing member 40. The housing member 40 is positioned around the motor member 24. The housing member 40 is designed for inhibiting moisture from contacting the motor member 24 to inhibit the motor member 24 is damaged by the moisture.

10 The drive assembly 16 comprises a transmitter assembly 42 and a receiver assembly 44. The receiver assembly 44 is operationally coupled to the motor member 24. The transmitter assembly 42 is positioned remotely from the receiver assembly 44. The transmitter assembly 42 transmitting an activation signal over
15 free space to the receiver assembly 44 to actuate the motor member 24 to slide the carriage member 20 along the rail member 18 when the transmitter assembly 42 is actuated by the user.

The mail receiving member 14 comprises a perimeter wall 46.
20 The perimeter wall 46 defines an interior space 48 of the mail receiving member 14. The interior space 48 comprises an open end whereby the open end is designed for permitting mail to is inserted into and retrieved from the interior space 48 of the mail receiving member 14.

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A cover member 50 is pivotally coupled to the mail receiving member 14. The cover member 50 is selectively pivoted over the open end of the interior space 48 of the mail receiving member 14 to selectively close the open end to inhibit precipitation from
30 entering the interior space 48 of the mail receiving member 14.

A signal member 52 is rotatably coupled the mail receiving member 14. The signal member 52 is selectively rotated to a first position to indicate to a mail carrier that mail is present in the mail receiving member 14 to be picked up by the mail carrier. The signal member 52 is selectively rotated to a second position to indicate to a mail carrier that there is no mail in the interior space 48 of the mail receiving member 14.

10 In use, the mail receiving member 14 is positioned adjacent the curb to receive mail from the mail carrier. The cover member 50 is pivoted and the mail carrier places mail in the interior space 48 of said mail receiving member 14 and closes the cover member 50 again. The user then actuates the transmitter assembly 42 to
15 actuate the motor assembly to draw the mail receiving member 14 towards the house. The user opens the cover member 50 to retrieve the mail from the mail receiving member 14 when the mail receiving member 14 has reached the house to limit contact the user has with the elements when retrieving mail. The transmitter
20 assembly 42 is actuated again to actuate the motor assembly to draw the mail receiving member 14 back to the curb to allow the mail receiving member 14 to receive mail from the mail carrier.

With respect to the above description then, it is to be realized
25 that the optimum dimensional relationships for the parts of the invention, to include variations in size, materials, shape, form, function and manner of operation, assembly and use, are deemed readily apparent and obvious to one skilled in the art, and all equivalent relationships to those illustrated in the drawings and
30 described in the specification are intended to be encompassed by the present invention.

Therefore, the foregoing is considered as illustrative only of the principles of the invention. Further, since numerous modifications and changes will readily occur to those skilled in the art, it is not desired to limit the invention to the exact construction and operation shown and described, and accordingly, all suitable modifications and equivalents may be resorted to, falling within the scope of the invention.